Attorney Docket No.: Navy Case 84629

Applicants: Nicholas V. Nechitailo

5406538879

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REMARKS

By this Amendment, claims 1, 7 and 34 are amended. Accordingly, claims 1, 7, 21, 22, 34, 35, 37 and 42 are pending in this application. No new matter is added by any of these amendments.

Reconsideration based on the following remarks is respectfully requested.

I. Withdrawal of Allowable Subject Matter

Applicant acknowledges that the Office Action withdraws the previous indication that formerly pending claims 40 and 41 contained allowable subject matter. Instead, the Office Action states that the term "comprising" in connection with the spherical and cubic shapes is open-ended and therefore not limiting. As such, Applicant amends claims 1, 7 and 34 to replace "comprising" with --consisting of --. Consequently, Applicant asserts that the pending claims are allowable.

Anticipatory Rejections under 35 U.S.C. §102 II.

The Office Action rejects claims 1, 7, 34, 35, 37 and 42 as being allegedly anticipated under 35 U.S.C. §102(b) over U.S. Patent 4,671,181 to Romer et al. (hereinafter "Romer").

These rejections are rendered moot by the revision of the features of formerly allowable claims 40 and 41 and intervening claimed features into independent claims 1, 7 and 34. Specifically, the independent claims are amended to obviate the reason for the Examiner's withdrawal of prior allowability.

Romer fails to describe or suggest the formerly allowable features, particularly a reactive composite material in a solid form consisting of one of a sphere and a cube. Instead, Romer teaches an anti-tank shell with cylindrical cross-section having a heavy metal core 1 threaded into a steel jacket 3. See, e.g., col. 2, lines 48-59 and Fig. 1 of Romer. Thus, this shell does not correspond to the recited shape configurations. This applies by extension to claims 35, 37 and 42 based on their dependence from claim 34.

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For at least these reasons, Applicant respectfully asserts that the independent claims are patentable over the applied reference. The dependent claims are likewise patentable over the applied references for at least the reasons discussed, as well as for the additional features they recite. Thus, Applicant respectfully requests that the rejection under 35 U.S.C. §102 be withdrawn.

Obviousness Rejection under 35 U.S.C. §103 ш.

The Office Action rejects claims 34, 35, 37 and 42 as being allegedly obvious under 35 U.S.C. §103(a) over U.S. Patent 5,198,616 to Anderson in view of U.S. Patent 5,445,079 to Boual. This rejection is rendered moot, as discussed supra, by the incorporation of ostensibly allowable subject matter into independent claim 34 from which claims 35, 37 and 42 depend.

Neither Anderson nor Boual teaches the formerly allowable features, specifically a reactive composite material in a solid form consisting of one of a sphere and a cube. In particular, Anderson discloses a frangible incendiary projectile 10 including a cylindrical casing 12, a tapered nose 14, an incendiary pellet 36 and a closure plug 40. The casing 12 includes porous rear and front sections 16, 18 produced from sintered steel powder. See, e.g., col. 4, lines 45-67, col. 6, line 53 – col. 7, line 4 of Anderson.

Further, Boual teaches an armor piercing fragmentation projectile including a body 1 and shroud 3 containing a dense head 2 for target penetration - elements that form either a cylinder or a frustum about a longitudinal axis. See, e.g., col. 2, lines 4-15 of Boual. There is no teaching or suggestion in either Anderson or Boual for the recited spherical and cubic forms for a reactive composite material.

For at least these reasons, Applicant respectfully asserts that independent claim 34 is patentable over the applied references. The dependent claims are likewise patentable over the applied references for at least the reasons discussed, as well as for the additional features they recite. Consequently, all the claims are in condition for allowance. Thus, Applicant respectfully requests that the rejection under 35 U.S.C. §103 be withdrawn.

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IV. Conclusion

In view of the foregoing, Applicant respectfully submits that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,

Gerhard W. Thielman Registration No. 43,186

Date: October 16, 2006

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